



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF:

DAVID NEVILLE PRUGH ET. AL.

CASE NO.: PR0031USPCT

SERIAL NO.: 10/500,262

GROUP ART UNIT: 1732

FILED: FEBRUARY 05, 2003

EXAMINER: EASHOO, MARK

CONFIRMATION NO.: 9346

FOR: SLOT DIE

RESPONSE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated September 27, 2005, reconsideration of this application is respectfully requested.

Please substitute for the present Sheet 4 of the drawings, the attached new Sheet 4 of the Drawings that now shows the cut line 6-6 along which the cross-sectional view of Figure 6 is taken.

The rejection of Claims 1 and 4 as being unpatentable over Leonard et al. (U.S. 5,587,184) in view of Nelson et al. (U.S. 6,813,820), under 35 U.S.C. 103(a), is respectfully traversed. Claims 1 and 4 recite a die comprising a first plate having a first lip, a first location, and a second location where the first location is between the second location and the first lip; and a second plate having a second lip, a third location, and a fourth location where the third location is between the fourth location and the second lip, the second location of the first plate being a distance away from the fourth location of the second plate. The die further comprises a shim having a top seat and a bottom seat. The top seat of the shim contacts the first plate at the first location, and the bottom seat of the shim contacts the second plate at the third location, so as to form a slot in the die which terminates at an orifice and is bounded at the orifice by the first and second lips, the first and second lips having a gap therebetween which is adjustable in size.

Leonard et al. disclose a die comprising first and second plates each having lips defining a gap and terminating in a die exit/orifice, and various locations for adjustment (see Figure 4); and a means for adjustably connecting the first and second plates such that the gap between the plate lips is controlled (see Figure 4).

Nelson et al. disclose a method for forming extrudate having substantially uniform thickness comprising forming a shim having top and bottom seats that contact first and second plates, respectively, thereby forming a slot therebetween (see Figures 7 and 8). Nelson also discloses connecting the die plate and shim in multiple locations (see Figures 7 and 8).

The Examiner has stated that it would be obvious to combine the above-described features of Leonard et al. and Nelson et al. because such references are from the same field of endeavor, namely, extrusion/coating dies, and that a person of ordinary skill in the art would have been motivated to make the combination “because Nelson et al. suggests that use of a shims forms a gap size that is closer to the desired size and thereby requires smaller lip adjustments during operation.” However, contrary to the Examiner’s statement, Nelson et al. do not suggest that the use of a shim forms a gap size closer to the desired size and thereby requires smaller lip adjustments. Nelson et al. never suggest the problem of “too large” large lip adjustments exists in the prior art, and that a shim will provide smaller lip adjustments by forming a gap size closer to the desired size. Nelson et al. disclose that if a shim almost does the trick, a more precise shim will definitely do the trick. He teaches an alternative to the presently claimed combination.

Nelson et al. actually teach away from Leonard et al. by the fact that Leonard is cited as close prior art, but then the solution disclosed is not to add a shim to Leonard et al. but to substitute a precise shim for the adjustability of Leonard et al. Even though both references address the same problem of making uniform extrudates, Nelson et al. solve the problem in a different and independent way by making a precisely machined shim. Nelson et al. are aware of Leonard et al. and other methods or attempts to improve coating uniformity (see column 1 at line 55) but solve the problem without any means of adjustment except a shim. Nelson et al. do not provide any motivation to add the adjusters of Leonard et al. Furthermore, adding the adjusters of Leonard et al. to the shim of Nelson et al. would remove the advantage of the precision of the shim; if it is sufficiently precise, then no adjustment would help and would only hinder. Conversely, adding the shim of Nelson et al. to the die of Leonard et al. would require all the adjusters to be adjusted to subtract out the effect of the shim on the gap. So there is no motivation to combine. By adding a shim to Leonard et al., one makes a single die useful for adjustments outside the range of the adjusters that does not require a precise shim. Since the combination of Leonard et al. with Nelson et al. as described above constitutes hindsight in view of Applicants’ present disclosure, it is respectfully submitted that the invention defined in Claims 1 and 4 is not obvious in view of such references and that Claims 1 and 4 are patentable over the cited references.

Claims 2 and 3 and Claim 5 are dependent from Claims 1 and 4, respectively. Therefore, Claims 2 and 3 and Claim 5 incorporate the patentable novelty of Claims 1 and 4, respectively, and the allowance of such claims over the cited references appears to be in order for at least the reasons given with respect to Claims 1 and 4.

Reconsideration and allowance of this application are respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script that reads "Thomas H. Magee".

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Enclosure